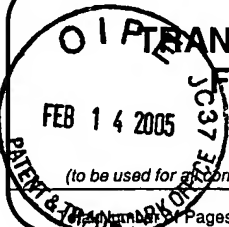




IFU

	Application Number	10/655,769
	Filing Date	September 5, 2003
	First Named Inventor	Soda, Haruhisa
	Art Unit	2876
	Examiner Name	Thien Minh Le
	Attorney Docket Number	089991-000000US
(to be used for correspondence after initial filing) Number of Pages in This Submission		

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard PTO/SB/08A & PTO/SB/08B 4 Reference Copies 1 EPO Search Report
Remarks: The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	Steve Y. Cho		
Date	February 9, 2005	Reg. No.	44,612

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Signature			
Typed or printed name	Tiffany Wu	Date	February 9, 2005

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:


Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450.

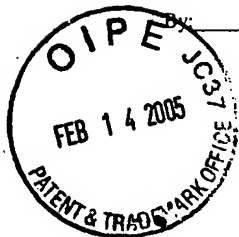
PATENT  
Attorney Docket No.: 089991-000000US  
Client Reference No.: PFBA-03040-US

On

2/14/05

TOWNSEND and TOWNSEND and CREW LLP

  
Tiffany Wu



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Haruhisa Soda et al.

Application No.: 10/655,769

Filed: September 5, 2003

For: OPTICAL SWITCH,  
DIRECTIONAL COUPLER TYPE  
OPTICAL MODULATOR WITH  
TRAVELING-WAVE ELECTRODE,  
AND OPTICAL COMMUNICATION  
SYSTEM

Examiner: Thien Minh Le

Art Unit: 2876

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER 37  
CFR §1.97 and §1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed.

Also enclosed is a copy of the Search report corresponding to the European application.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

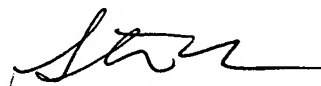
This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

CERTIFICATION

I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.

Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Steve Y. Cho  
Reg. No. 44,612

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: 650-326-2400  
Fax: 650-326-2422  
SYC:ewm

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(use as many sheets as necessary)*

Sheet	1	of	2
-------	---	----	---

Application Number	10/655,769
Filing Date	September 5, 2003
First Named Inventor	Soda, Haruhisa
Art Unit	2876
Examiner Name	Thien Minh Le
Attorney Docket Number	089991-000000US

[illegible][illegible]Date  
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/655,769	
			Filing Date	September 5, 2003	
			First Named Inventor	Soda, Haruhisa	
			Art Unit	2876	
			Examiner Name	Thien Minh Le	
Sheet	2	of	2	Attorney Docket Number	089991-000000US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	3	Alferness et al. "High-speed Traveling-Wave Directional Coupler Switch/Modulator for $\lambda=1.32 \mu\text{m}$ ," IEEE Journal of Quantum Electronics USA, vol. QE-19, no. 9, September 1983, pp. 1339-1341.	
	4	Komatsu et al., "4X4 GaAs/AlGaAs Optical Matrix Switches with Uniform Device Characteristics Using Alternating $\Delta\beta$ Electrooptic Guided-Wave Directional Couplers," Journal of Lightwave Technology, IEEE, 9(1991)July, No. 7, New York, pp. 871-878.	
	5	Walker et al., "Low-Voltage, 50 $\Omega$ , GaAs/AlGaAs Travelling-Wave Modulator with Bandwidth Exceeding 25 GHz," Electronics Letters, IEE Stevenage, GB, vol. 25, no. 23, November 1989, pp. 1549-1550.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.